

**ENVIRONMENTAL ASSESSMENT**  
**IMPLEMENTATION OF A MILITARY VEHICLE FUELING**  
**PLAN ON FORT BLISS, TEXAS AND NEW MEXICO**

*Prepared For:*

U.S. Army Garrison Fort Bliss

*Prepared by:*

Army Environmental Command

and

Fort Bliss  
DPW-Environmental  
Bldg. 624  
Pleasanton Road.  
Fort Bliss, TX 79916

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**PREPARED FOR:**

\_\_\_\_\_  
Victor V. Eslinger  
Director, DOL  
Fort Bliss, Texas

\_\_\_\_\_  
Date

\_\_\_\_\_  
Alfredo J. Riera, P.E.  
Director, DPW  
Fort Bliss, Texas

\_\_\_\_\_  
Date

**REVIEWED BY:**

\_\_\_\_\_  
Vicki Hamilton, R.A.  
Chief, Environmental Division  
Directorate of Public Works

\_\_\_\_\_  
Date

**APPROVED BY:**

\_\_\_\_\_  
Joseph A. Simonelli, Jr.  
Colonel, U.S. Army  
Commanding

\_\_\_\_\_  
Date



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## ACRONYMS AND ABBREVIATIONS

1		
2	AIRFA	American Indian Religious Freedom Act
3	AQCR	Air Quality Control Region
4	ARPA	Archaeological Resources Protection Act
5	AST	Aboveground Storage Tank
6	AT/FP	Anti-Terrorism Force Protection
7	B2	Bio Diesel Fuel
8	BAAF	Biggs Army Airfield
9	BLM	Bureau of Land Management
10	BMPs	Best Management Practices
11	CAAA	Clean Air Act Amendments of 1990
12	CAB	Combat Aviation Brigade
13	CC	Compliance-Related Cleanup
14	CEQ	Council on Environmental Quality
15	CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
16	CFR	Code of Federal Regulations
17	CIRRP	Capital Improvements and Renewals and Replacements Plan
18	COCO	Contractor Owned/Contractor Operated
19	CWA	Clean Water Act
20	dB	Decibels
21	dBA	“A-weighted” Decibel
22	DoD	Department of Defense
23	DLA-E	Defense Logistics Agency - Energy
24	DNL	Day-Night Average Sound Level
25	DOL	Directorate of Logistics
26	DPW-MP	Directorate of Public Works - Master Planning
27	DS2	Ultra Low Sulfur Diesel Fuel

1	E85	Fuel Blend 85% Gasoline and 15% Ethanol
2	EA	Environmental Assessment
3	EIS	Environmental Impact Statement
4	EISA	Energy Independence and Security Act
5	EMU	Ecological Management Units
6	EO	Executive Order
7	EOD	Explosive Ordnance Disposal
8	EPWU	El Paso Water Utilities
9	ESA	Endangered Species Act
10	FBTC	Fort Bliss Training Complex
11	FORSCOM	United States Army Forces Command
12	GHGs	Greenhouse Gases
13	GOCO	Government Owned/Contractor Operated
14	GSA	General Services Administration
15	GUR	Gasoline
16	HWSF	Hazardous Waste Storage Facility
17	IBCT	Infantry Brigade Combat Team
18	ICRMP	Integrated Cultural Resources Management Plan
19	IICEP	Intergovernmental and Interagency Coordination for Environmental Planning
20	INRMP	Integrated Natural Resources Management Plan
21	IRP	Installation Restoration Program
22	JP8	Jet Propulsion 8 Fuel
23	kV	Kilovolt
24	LUA	Limited-use Areas
25	mgd	Million Gallons per Day
26	MMRP	Military Munitions Response Program
27	MS4	Municipal Separate Storm Sewer System



1	MSA	Mutual Support Agreement
2	MW	Megawatts
3	NAAQS	National Ambient Air Quality Standards
4	NAGPRA	Native American Graves Protection and Repatriation Act
5	NEPA	National Environmental Policy Act
6	NFPA	National Fire Protection Association
7	NHPA	National Historic Preservation Act
8	NMDGF	New Mexico Department of Game and Fish
9	NMED	New Mexico Environmental Department
10	NWI	National Wetlands Inventory
11	P2	Pollution Prevention
12	PA	Programmatic Agreement
13	RCRA	Resource Conservation and Recovery Act
14	SGM	Sergeant Major
15	SOP	Standard Operating Procedure
16	SPL	Sound Pressure Level
17	SWPPP	Storm Water Pollution Prevention Plan
18	TAs	Training Areas
19	TCEQ	Texas Commission on Environmental Quality
20	TMP	Troop Motor Pool
21	TPWD	Texas Parks and Wildlife Department
22	TSCA	Toxic Substance Control Act
23	UFC	Unified Facilities Criteria
24	USC	United States Code
25	USEPA	United States Environmental Protection Agency
26	USFWS	United States Fish and Wildlife Service
27	UST	Underground Storage Tanks

- |   |      |                                 |
|---|------|---------------------------------|
| 1 | UXO  | Unexploded Ordnance             |
| 2 | VECs | Valued Environmental Components |
| 3 | WSMR | White Sands Missile Range       |

## **CHAPTER 1 PURPOSE OF AND NEED FOR PROPOSED ACTION**

### **1.1 INTRODUCTION**

Fort Bliss, a US Army Forces Command (FORSCOM) installation encompasses approximately 1.12 million acres of land in the extreme western part of Texas and the south-central area of New Mexico. The Cantonment Area of Fort Bliss is located in El Paso, Texas, while 90 percent of the training lands and several base camps are located in New Mexico.

The United States Army is in the process of investing significant force structure at Fort Bliss. The 2005 Base Realignment and Closure requirements realigned Fort Bliss by relocating Air Defense Artillery units to Fort Sill and relocating the 1<sup>st</sup> Armored Division from Germany to Fort Bliss. Due to this move, Fort Bliss is expanding its training facilities and capabilities, which is creating a need for additional infrastructure to include fueling facilities for tactical vehicles in the training areas. To meet this additional infrastructure requirement, the Fort Bliss Directorate of Public Works Master Planning (DPW-MP) office, in partnership with the Defense Logistics Agency – Energy Division (DLA-E) and Directorate of Logistics (DOL), has generated a Fueling Plan for Fort Bliss. The Fueling Plan will be a living document that can be changed per requirements and as such is subject to additional environmental review as needed. The current plan is designed to provide for Fort Bliss' fueling requirements until the end of year 2013 and can be viewed at the Office of the Fort Bliss DPW-MP.

### **1.2 PURPOSE OF AND NEED FOR PROPOSED ACTION**

The purpose of the Fueling Plan (Appendix) is to address tactical and non-tactical vehicle fuel facility shortfalls identified by an Optimization Study conducted by the Army Petroleum Center in 2009. Tactical vehicles are generally war-fighting vehicles such as tanks, HUMVEES, and others, while non-tactical refers to government-owned vehicles such as General Service Administration (GSA) cars and SUVs. The Optimization Study identified the need to construct new facilities, renovate inadequate facilities, and demolish out-dated facilities as outlined in Table 1-1.

The Fueling Plan especially addresses the requirements for additional facilities within the training range complex. Additional fueling facilities are needed to provide a cost effective manner to supply both JP8 and retail fuel to Soldiers training on Fort Bliss especially in the field. Presently, fuel is hauled via tanker trucks to training sites, a hazardous and inefficient operation. Transporting fuel and containment devices to the field by Soldiers in training presents a logistical problem and risks fuel spillages and catastrophic accidents. Currently Fort Bliss has no fueling facilities at Orogrande Range Camp or the Infantry Bridge Combat Team (IBCT) area. Doña Ana Range Camp has out-dated and undersized fueling facility, while McGregor Range Camp has an out-dated but currently adequate facility.

Fort Bliss would use the regulated method of dispensing fuel per current United States Environmental Protection Agency (USEPA), New Mexico Environmental Department (NMED),

**Table 1-1 Fueling Plan Facility Requirements**

FACILITY	LOCATION	STATUS	OWNER/OPERATOR
Loop 375 Bulk	IBCT area of East Biggs	New	COCO <sup>1</sup>
Loop 375 Retail	IBCT area of East Biggs	New	COCO
Biggs AAF	Combat Aviation Brigade Area, Biggs AAF <sup>3</sup>	Existing facility to be leased for Contractor operation	GOCO <sup>2</sup>
Hot Refueling	Biggs AAF	Government owned, currently under construction	GOCO
Doña Ana Range	Doña Ana Range Camp	Old facility will be replaced by new	GOCO
Orogrande (Bulk and retail)	Orogrande Range Camp	New	GOCO – Bulk COCO - Retail
McGregor	McGregor Range Camp	Existing GOCO	GOCO
Building 2642	Main Cantonment	Existing. To be renovated	GOCO

<sup>1</sup> COCO = Contractor-owned/Contractor-operated

<sup>2</sup> GOCO = Government-owned/Contractor-operated

<sup>3</sup> AAF = Army Air Field

and Texas Commission on Environmental Quality (TCEQ) standards; store fuel in regulated containers with secondary containments, with leak detection devices installed; and provide a professional operation where fuel facilities would be managed by trained professionals. The facilities would dispense gasoline – unleaded regular (GUR), Jet Propulsion 8 (JP8), E85 (a blend of 85% gasoline and 15% ethanol), DS2 (ultra low sulfur Diesel), and B2 (Bio Diesel). JP8 fuel is jet fuel used in government diesel-fueled vehicles including nearly all tactical ground vehicles. Retail fuel is used for GSA and other official vehicles, and does not include personnel vehicles or retail sales to the public.

### 1.3 DECISION TO BE MADE

This analysis evaluates the potential environmental consequences from the implementation of the Fueling Plan on Fort Bliss to include the demolition of out-dated, renovation of existing marginally adequate, and construction of new facilities. The plan includes leasing real property to a Contractor(s) for a period of approximately 25 years to build and operate facilities (COCO), as well as the leasing of government-owned, existing facilities to a Contractor(s) to operate for an as yet undetermined period (GOCO). Based on this analysis, the U.S. Army will determine whether to allow implementation of the Proposed Action (the Fueling Plan) or take no action (“No-action Alternative”). As required by the National Environmental Policy Act (NEPA) and its implementing regulations, preparation of an environmental document must precede final decisions regarding the proposed project, and must be available to inform decision-makers of the potential environmental impacts of selecting the Proposed Action or the No-action Alternative.

### 1.4 SCOPE OF THE ENVIRONMENTAL REVIEW

The NEPA requires Federal agencies to consider environmental consequences in their decision-making process. The President’s Council on Environmental Quality (CEQ) has issued

regulations to implement NEPA that include provisions for both the content and procedural aspects of the required environmental impact analysis. The NEPA process is accomplished through adherence to the procedures set forth in CEQ regulations (40 Code of Federal Regulations [CFR] Sections 1500-1508), Department of Defense (DoD) Instruction 4715.9 *Environmental Planning and Analysis*, and 32 CFR 651, *Environmental Analysis of Army Actions*, 29 March 2002, especially section 651.10 (a). These Federal regulations establish both the administrative process and substantive scope of the environmental impact evaluation designed to ensure that deciding authorities have a proper understanding of the potential environmental consequences of a contemplated course of action.

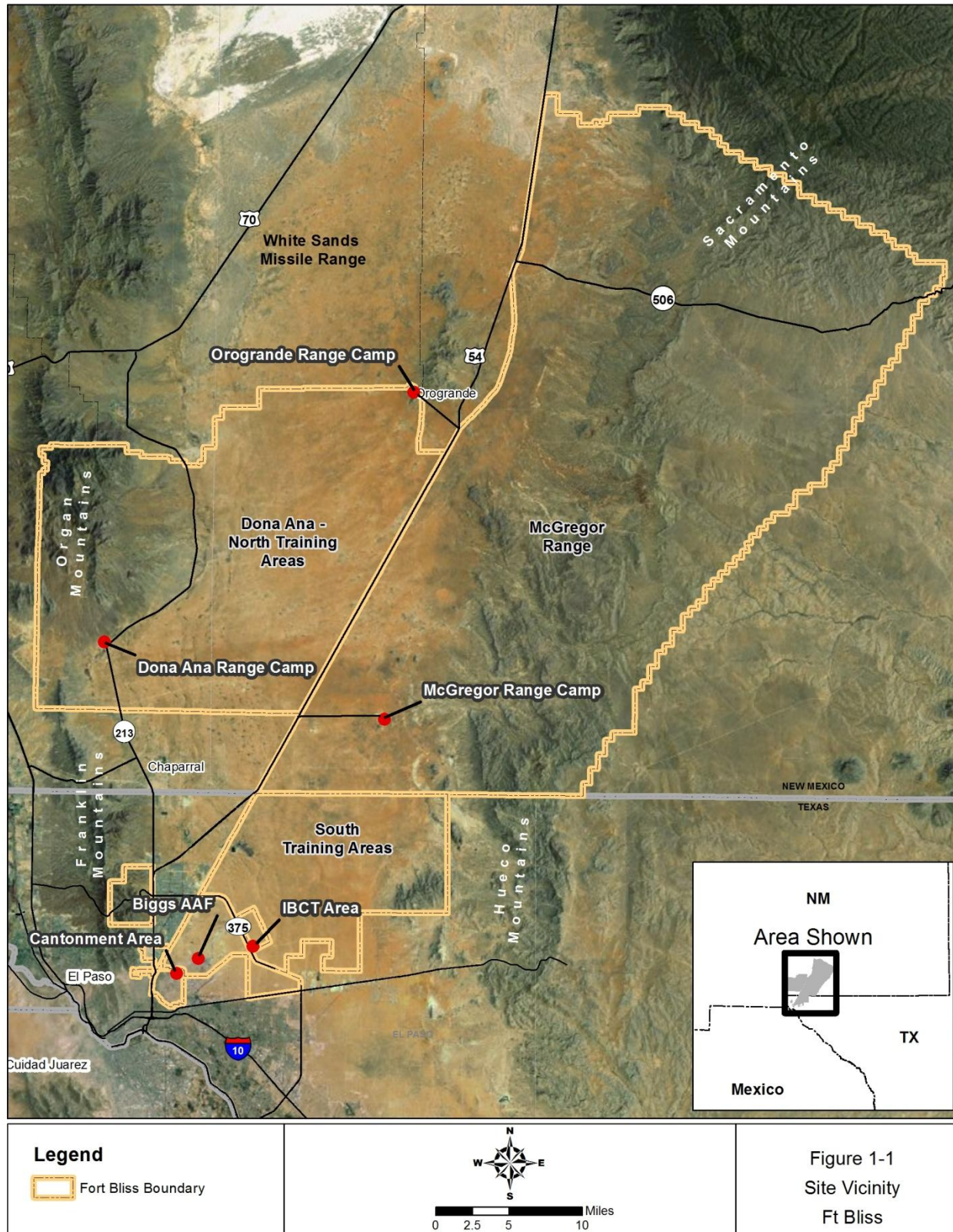
This Environmental Assessment (EA) identifies, describes and evaluates the potential environmental impacts that are associated with the lease of land and construction of COCO facilities and the construction, renovation, and operation of GOCO fueling facilities at Fort Bliss. The potential environmental effects of taking no action are also described. It is important to note that a *Mission and Master Plan Supplemental Programmatic Environmental Impact Statement* (EIS) was prepared in 2007 (hereinafter referred to as 2007 EIS) which included analysis of construction of additional fueling facilities to support training at Fort Bliss, however, specific details relating to the fueling facilities were not known at the time the document was prepared. Since that time, Fort Bliss has identified proposed locations and capacities of the needed fueling facilities. This EA serves to tier from the 2007 EIS and presents a detailed environmental analysis of the proposed construction, renovation, and contractor operated fueling facilities. As such, much of the affected environment descriptions is summarized and incorporated by reference to the 2007 EIS. References are also made to the affected environment section of the 2010 *Fort Bliss Army Growth and Force Structure Realignment EIS* (hereinafter referred to as the 2010 EIS).

## **1.5 APPLICABLE REGULATORY REQUIREMENTS**

### **1.5.1 Interagency and Intergovernmental Coordination**

Federal, state, and local agencies with jurisdiction that could be affected by the proposed or alternative actions have been notified and consulted. A complete listing of the agencies consulted may be found Appendix B. This coordination fulfills the *Intergovernmental Cooperation Act of 1968* (42 United States Code [USC] 4231(a) and Executive Order (EO) 12372, *Intergovernmental Review of Federal Programs* (14 July 1982), which requires Federal agencies to cooperate with and consider state and local views in implementing a Federal proposal.





This Environmental Assessment (EA) identifies, describes and evaluates the potential environmental impacts that are associated with the lease of land, and construction, renovation, and operation of three COCO and one GOCO fueling facilities at Fort Bliss. The potential environmental effects of taking no action are also described. As appropriate, the affected environment and environmental consequences of the action may be described in terms of a regional overview or a site-specific description. It is important to note that a *Mission and Master Plan Supplemental Programmatic Environmental Impact Statement* (EIS) was prepared in 2007 (hereinafter referred to as 2007 EIS) which included analysis of construction of fueling facilities to support additional Soldiers and their families being stationed at Fort Bliss. This EIS covered a wide range of actions, but specific details relating to the fueling facilities were not known at the time the document was prepared. Since that time, Fort Bliss has identified proposed locations, numbers, and capacities of the needed fueling facilities. This EA serves to tier from the 2007 EIS and presents a detailed environmental analysis of the construction, renovation, and operation of these four proposed fueling facilities. As such, much of the affected environment descriptions will be briefly summarized and then incorporated by reference to the 2007 EIS. References may also be made to the affected environment section of the 2010 *Fort Bliss Army Growth and Force Structure Realignment* EIS (hereinafter referred to the 2010 EIS) if the data is applicable to this EA's proposed project sites and is more current than the 2007 EIS. If more detailed data is available than what is presented in either of these EISs, it will be presented in this EA.

### 1.5.2 Permits

All underground utility locations (Digging Permit) would need to be identified prior to any construction or renovation activities. The contractor would also ensure that a storm water pollution prevention plan (SWPPP) is completed and approved before initiating construction and renovation activities. All applicable Federal, State, and local fuel operation permits will be obtained by the Contractor(s) prior to initiation of operation and kept up to date as required.

### 1.5.3 Other Regulatory Requirements

The EA considers all applicable laws and regulations, including but not limited to the following:

- *Clean Air Act* (42 USC 7401 et seq.)
- *Clean Air Act Amendments of 1990* (CAAA) (42 USC 7401 et seq.)
- EO 11990, *Protection of Wetlands* (24 May 1977)
- *Clean Water Act* (CWA) (33 USC 1251 et seq.)
- Section 404 of the CWA (33 USC 1251 et seq., 40 CFR 232.2)
- Section 10 of the *Rivers and Harbors Act of 1899* (33 USC 403)
- EO 11988, *Floodplain Management* (24 May 1977)
- *Endangered Species Act* (ESA) (16 USC 1531-1542)
- *Migratory Bird Treaty Act of 1918* (16 USC 703-712)
- *Pollution Prevention Act* (42 USC 13101 and 13102 et seq.)
- *Archaeological Resources Protection Act* (ARPA) (16 USC 470 et seq.)
- *National Historic Preservation Act* (NHPA) (16 USC 470)
- *American Indian Religious Freedom Act* (AIRFA) (42 USC 1996)

- *Protection of Historic Properties* (36 CFR 800)
- *Native American Graves Protection and Repatriation Act of 1991* (NAGPRA) (25 USC 3001 et seq.)
- *Resource Conservation and Recovery Act* (RCRA) (40 CFR Parts 240-244, 257, 258, 260 et seq.)
- *Toxic Substance Control Act* (TSCA) (15 USC 2601 et seq.)
- *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA) (42 USC 9610)
- *Superfund Amendments and Reauthorization Act* Title III (40 CFR 300 et seq.)
- *Emergency Planning and Community Right-to-Know Act* (16 USC 116)
- EO 12580, *Superfund Implementation* (23 January 1987)
- *Occupation Safety and Health Act* (29 USC 651 et seq.)
- *Energy Independence and Security Act* (Public Law 110-140)
- EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (11 February 1994)
- *Oil Pollution Prevention* (40 CFR 112)



## CHAPTER 2 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

### 2.1 SELECTION CRITERIA FOR ALTERNATIVES

The alternatives developed for the analysis at Fort Bliss are designed to address the current fueling and storage shortfalls realized by Soldiers training both in the Cantonment Area and in the field. The construction, renovation, and operation of such facilities must:

- Comply with Anti-Terrorism Force Protection (AT/FP) requirements,
- Meet Unified Facilities Criteria (UFC); specifically: UFC 3-460-01
- Be accessible to training and maneuver areas,
- Sufficient space to provide proper application of force protection stand-off measures,
- Not affect known cultural resources in the area,
- Not be located in an area with overhead power lines,
- Be logistically feasible,
- Provide an increased level of security,
- Not be located in a limited-use areas (LUAs) such as playas and riparian (arroyo) habitats,
- Be designed such that tractor-trailer rigs can easily access and maneuver within the fueling station,
- Not impact mission critical facilities or operations.

### 2.2 DESCRIPTION OF THE PROPOSED ACTION

The Proposed Action would involve the implementation of the Fueling Plan and its requirements for demolition, renovation, and construction of fueling facilities. The action covers leasing of Army land to a Contractor(s) for a period of approximately 25 years for the construction and operation of COCO fueling facilities and contracting the operation of government owned fueling facilities to a private operator(s). These actions are planned to support the growing mission at Fort Bliss. All new fuel storage tanks would be above ground, double-walled with interstitial leak detection devices, and compliant with all applicable Federal and State laws and regulations. The operator would follow Fort Bliss Standard Operating Procedures (SOPs) regards the operation of facilities, to include but not limited to, inventory tracking, leak detection monitoring, and spill reporting requirements. In addition, each site would have a storm water detention pond and surface water would flow through a containment oil/water separator basin prior to discharge into the detention pond. Fuel would be delivered to each facility via commercial tanker trucks operated by civilian professional drivers.

The DLA-E would be responsible for direct management of the fueling contracts, including those for the contractor owned and/or operated facilities per all applicable Department of Defense (DoD) directives including but not limited to those published in 1994, 2004, and 2010 (see references section of this report). Fort Bliss would provide support as required as outlined in a Memorandum of Agreement with the DLA-E to be completed as part of the Fueling Plan implementation.

The amount of fuel expected to be used on any given day would vary depending on the current mission operational tempo; however, the total amount of fuel to be used would be similar to current conditions. New Fueling and Storage facilities are proposed for locations within the Cantonment Area and the IBCT area on East Fort Bliss in Texas, and in New Mexico at the Doña Ana Range Camp and adjacent to the Orogrande Range Camp. All new facilities would be constructed within existing cantonments with the exception of the Orogrande Fueling Facility. This facility would be located outside the base camp boundary and would require the removal of four acres from training lands. However, the SEIS defined this area as Category A which allows Mission Support Facilities, such as fueling operations. Therefore, no real changes in land use would occur as a result of the proposed action.

The following sites are part of the near term (to end of year 2013) plans as set forth in the Fueling Plan.

- **Cantonment Area** - The proposed Cantonment Area facility is located at the northwest corner of Carrington Road and Shannon Van Valzah Road (Building 2642) (See Figure 2-1). This is an existing government-owned facility that would require some site maintenance and equipment upgrades. There are currently three 10,000 gallon JP8 above ground storage tanks (AST) present at this facility. After renovation, there would be one 10,000-gallon AST for gasoline, and two 10,000-gallon ASTs for low-sulfur diesel. The footprint of the fueling facility would remain the same as currently existing. No ground disturbance would be expected from the renovations. This facility would be utilized for retail only for GSA vehicles and be operated by a contractor.

- **Infantry Brigade Combat Team Area** - The proposed IBCT facility would be located on previously disturbed land east of Loop 375, north of Spur 601 in the southwest corner of the IBCT Area (See Figure 2-2). This area was analyzed in the SEIS for complete development of facilities for the Infantry Brigades and other support structures. The proposed site is substantially disturbed due to established dirt roads and vehicle traverses; however, much of the coppice dune landscape (tops of the dunes) is largely intact. Development would consist of two separate operations – both bulk and retail fueling. The facility would store and dispense all types of bulk and retail fuel, from ten separate ASTs with a minimum total storage capacity of 349,000 gallons.

- **Biggs Army Airfield** - Two government-owned facilities located within BAAF would be turned over to a Contractor(s) for operation (GOCO) (See Figure 2-1). The first, a Combat Aviation Brigade (CAB) fuel point consists of two 180,000 gallons ASTs each dispensing aviation fuel. The facility includes a flight line fuel stand canopy, offload fill stand canopy, and Pump house building.

The other is the Hot Fueling facility located on the tarmac of BAAF area and is currently under construction. Once completed, the facility will have the capacity to store and dispense 60,000 gallons of JP8.

- **Doña Ana Range Camp** - The proposed Doña Ana facility, sited on previously disturbed land within the northeast corner of the Doña Ana Range Camp, is located in Doña Ana North Training Area 3B off of NM 213 (War Highway) in New Mexico (See Figure 2-3). It

1 would store and dispense JP8 and gasoline retail fuel from two ASTs with a total storage  
2 capacity of 24,000 gallons.

3  
4 • **Orogrande Range Camp** - The proposed Orogrande facility, located on desert  
5 land within Doña Ana North Training Area 7B, east of Orogrande Range Camp on the south side  
6 of WSMR P Route 2 in New Mexico (See Figure 2-4). Approximately four acres of undisturbed  
7 land would need to be cleared for construction of this facility. This facility would store and  
8 dispense JP8 bulk and retail fuel, as well as retail gasoline, from four ASTs with a minimal  
9 storage capacity of 124,000 gallons. Electrical power would be tied-in to an existing line  
10 extending along the north side of the road adjacent to the proposed facility.

11  
12 • **McGregor Range Camp** - The McGregor Fuel Point at the McGregor Range  
13 Camp would continue to be operated as a GOCO site. It has the capacity to store 35,000 gallons  
14 in two Underground Storage Tanks (USTs) and dispenses both GUR and JP8 for retail use.

15  
16 **Decommissioning and Demolition** - As part of the Fueling Plan, several facilities would be  
17 decommissioned and demolished by the DLA-E. These include the following facilities:

18  
19 • The Cassidy Road Troop Motor Pool (TMP) Retail Fuel Point (Building 1326)  
20 consisting of four (4) 10,000 gallon USTs, one of which is an E85, two are GUR and, and one is  
21 diesel. Demolition would include all fuel dispensers.

22  
23 • The existing BAAF Bulk Fuel Point located by Biggs gate, off of SGM  
24 Boulevard. This facility consists of one (1) 250,000 gallon AST and three (3) 25,000 ASTs.

25  
26 • The existing Atlantic Aviation Fueling Facility on BAAF. This is a COCO  
27 facility and consists of ten (10) 25,000 gallon USTs for JP8.

28  
29 • The existing Doña Ana Fuel Point. This fueling facility consists of two (2) ASTs.  
30 One is a 5,000 gallon JP8 tank and the other a 2,000 gallon GUR.

31  
32 Decommissioning and demolition of any fuel site would undergo a thorough review for the  
33 presence of asbestos and lead-based paint on the structural surfaces, and fuel leaks or spills that  
34 may have affected the soil surface. These, if found, would be reported to the state regulatory  
35 agencies and remediated per regulatory and Fort Bliss requirements.

36  
37 All proposed new construction facility locations would be surveyed for unexploded ordnance  
38 (UXO) prior to construction. Any detected UXO will be either be destroyed in place or removed  
39 for demolition on an explosive ordnance disposal range by Explosive Ordnance Disposal (EOD)  
40 personnel, as per approved procedures for Fort Bliss. In Table 2-1, is shown the facility type,  
41 fuel type, capacity, and number of tanks associated with the proposed new construction fueling  
42 facilities.

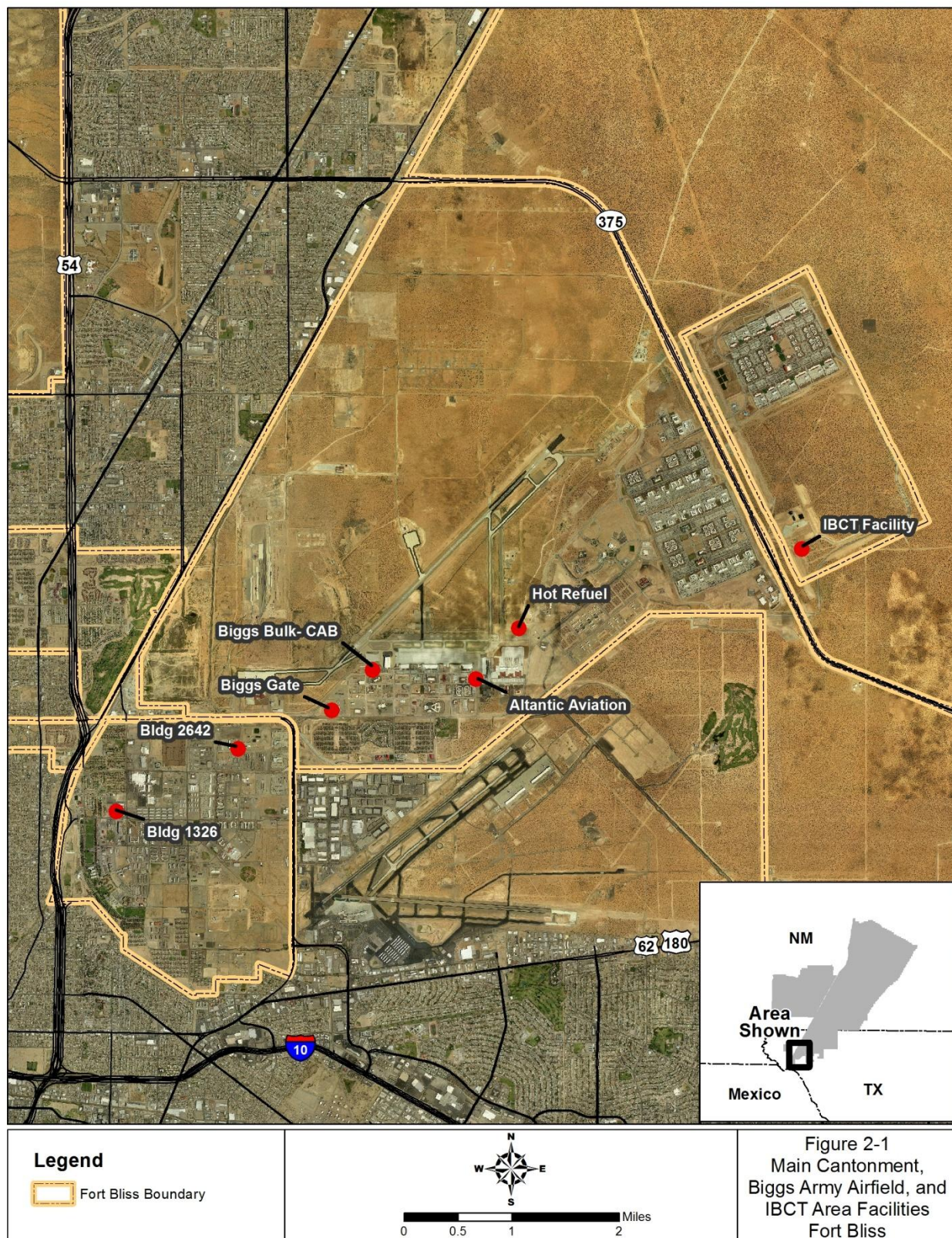
1 **Table 2-1 Fuel Tanks at the Proposed New Fueling Facilities**

Fueling Facility Site	Facility Type	Fuel Type	Capacity in Gallons	# of Tanks	Total Capacity for Facility in Gallons
<b>Cantonment Area( Building 2643)</b>	Retail	GUR	10,000	1	<b>30,000</b>
		DS2	20,000	2	
<b>IBCT Area</b>	Retail	DS2	Min 20,000	1	<b>Min 394,000</b>
		GUR	Min 20,000	2	
		E85	12,000	1	
		JP8	Min 20,000	2	
		B20	12,000	1	
	Bulk	JP8	250,000	2	
		GUR	Min 20,000	1	
<b>Orogrande</b>	Retail/Bulk	JP8	100,000	2	<b>Min 124,000</b>
		GUR	12,000	1	
		JP8	12,000	1	
<b>Doña Ana</b>	Retail	JP8	12,000	1	<b>24,000</b>
		GUR	12,000	1	
<b>BAAF CAB</b>	Bulk	JP8	180,000	2	<b>360,000</b>
<b>BAAF Hot Fuel</b>	Retail	JP8	30,000	2	<b>60,000</b>

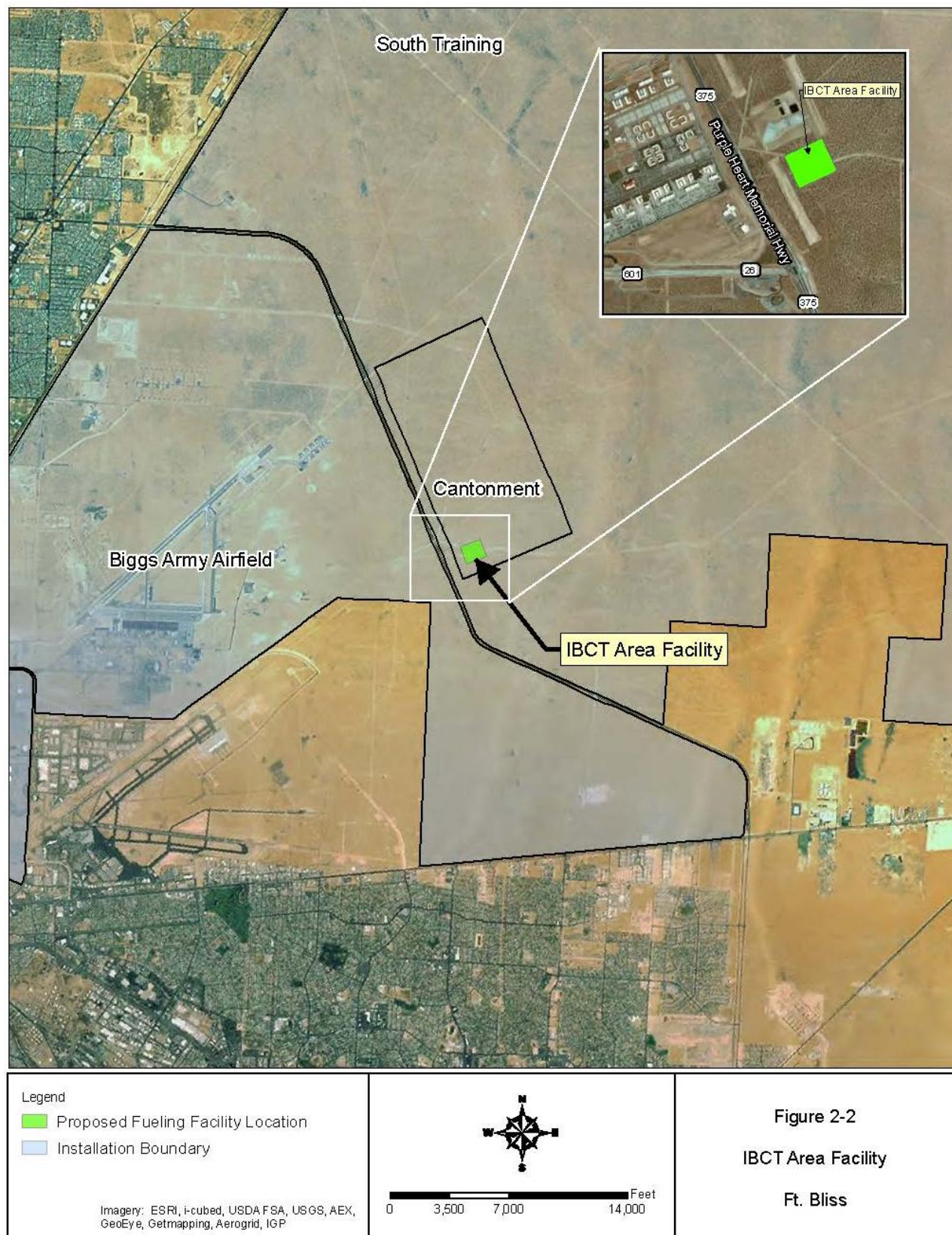
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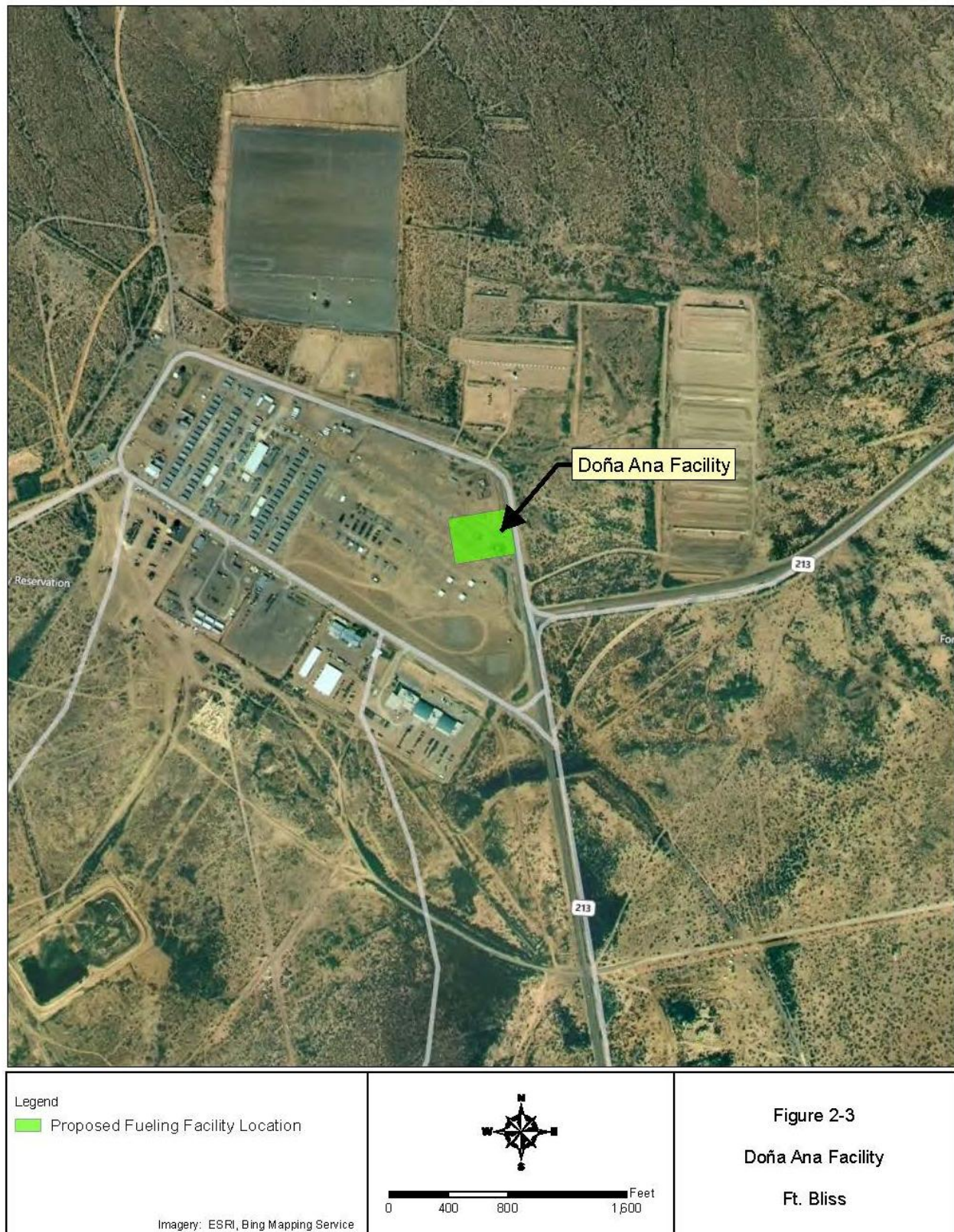


















## 2.3 DESCRIPTION OF THE NO-ACTION ALTERNATIVE

The no-action alternative would result in continued fuel facility shortfalls at Fort Bliss. Fuel would continue to be hauled via tanker trucks to training areas. Additionally, secondary spill containment devices would have to be transported to these sites. This is dangerous, inefficient, and can impact soil and water resources if there is a spill. Orogrande Range Camp and the IBCT area would not have a fueling facility and the Doña Ana Range Camp would continue to have an inadequate fuel point. The existing BAAF Fuel Farm near Biggs gate would continue to operate in a dangerous location adjacent to housing. In addition, the manner of supplying fuel to Soldiers training in the Cantonment Area and in the field would be costly, and the fueling operations would continue to be managed by Soldiers who may not be fully trained to handle, store, transport, and dispense fuel.

## 2.4 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

Two alternative actions were considered but eliminated from consideration as follows:

- **Alternate locations for the Orogrande site** - Three other site locations were considered for the Orogrande facility. A site within the Base Camp was not feasible due to the presence of the Special Forces camp that occupies the entire site. One site was eliminated from consideration due to the known presence of cultural resources in the area and the anticipated impacts to those resources as a result of construction activities. The third location was eliminated due to the presence of overhead power lines that can cause a potential for static build-up and was therefore a safety issue.

- **Use of fuel bladders and fuel trucks** - The use of fuel bladders and fuel trucks were considered to provide fuel for the range camps, but this alternative was eliminated due to the danger of spills and ruptures, risk of groundwater contamination, and the potential security threat. Tactical fuel trucks as the main means of providing fuel were eliminated from further consideration due to inefficiency, the risk of spills and accidents, increased vehicle emissions, and increased transportation costs. However, to provide field training, fueling using these types of vehicles will still continue in a limited basis on Fort Bliss.

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## CHAPTER 3 AFFECTED ENVIRONMENT

### 3.1 DESCRIPTION OF THE AFFECTED ENVIRONMENT

Under NEPA, the analysis of environmental conditions only addresses those areas and environmental resources with the potential to be affected by the Proposed Action. This includes all areas and lands that might be affected and may change depending on how the natural, cultural, and socioeconomic resources they contain or support are affected. Locations and resources with no potential to be affected need not be analyzed. A list of Valued Environmental Components (VECs) (US Army 2007) was utilized to determine what resources could potentially be affected by the Proposed Action.

### 3.2 VALUED ENVIRONMENTAL COMPONENTS ADDRESSED IN DETAIL

The following VECs are discussed in detail in the EA:

- Land Use
- Infrastructure
  - Electricity
  - Solid Waste Disposal
  - Water Supply
  - Ground Transportation
  - Storm Water
- Earth Resources
- Air Quality
- Water Resources
- Biological Resources
- Cultural Resources
- Noise
- Safety
  - Ground Safety
  - Fuel Safety
- Hazardous Materials and Items of Special Concern

### 3.3 VEC ANALYSIS

#### 3.3.1 Land Use

##### 3.3.1.1 *Cantonment Area*

The Cantonment Area contains the heaviest concentration of facilities and mission support activities on Fort Bliss. The Cantonment Area covers one percent of the total acreage of Fort

Bliss, and includes all of the installation south and west of Loop 375, and a portion east of Loop 375. It also includes BAAF. Support services in the Cantonment Area include administration, maintenance, service, storage and supply buildings, housing, and medical and community facilities. The Cantonment Area is designated for a single-mixed use land use designation, as opposed to having specific areas designated for individual land use categories. The single mixed use includes light industrial facilities such as fueling facilities.

### **3.3.1.2 Doña Ana Range-North Training Area**

The Doña Ana Range-North Training Area is located in New Mexico west of US 54 and consists of training areas (TAs), firing ranges, impact areas, and two range camps (Doña Ana Range Camp and Orogrande Range Camp). Land use of Doña Ana Range includes both military and recreational. Military land use includes off-road maneuver, weapons firing, and use of support facilities. State Highway 213 (“War Highway”) is a public access road in the area that serves as the primary link between El Paso and White Sands Missile Range (WSMR).

The proposed Doña Ana fueling facility would be located within the Doña Ana Range Camp boundary, located west of War Highway in TA 3B (Figure 2-3).

The proposed Orogrande fueling facility would be located east of Orogrande Range Camp on the south side of Orogrande Range Camp Road in TA 7B, classified as Land Use Category A (U.S. Army 2010). Category A allows off-road and on-road vehicle maneuvering for all types of vehicles and equipment, including both tracked and wheeled vehicles; dismounted (foot traffic) maneuvering and training; aircraft operations; mission support facilities; and other activities and uses. Category A also allows non-military, public use in designated areas, provided such use does not conflict with military uses or pose safety risks to the public. Non-military use includes public recreation such as hunting and hiking. Non-military use is controlled by Fort Bliss Range Operations to ensure safety and compatibility with military activities.

## **3.3.2 Infrastructure**

### **3.3.2.1 Electricity**

The electrical public utility for Fort Bliss is El Paso Electric. Rio Grande Electric COOP is a privatized utility partner on the post maintaining distribution infrastructure. Fort Bliss electricity consumption reported for FY2010 is 30 to 40 megawatts (MW) base load, and 65.8 MW maximum peak load. Projected electrical consumption in 2015 is 80 MW base load, and 130 MW maximum peak load (US Army 2011a). Based upon the existing infrastructure and current consumption rates, capacity exists for expansion.

Electric infrastructure is in place for the Cantonment Area; however electric infrastructure would need to be installed to serve the proposed IBCT, Doña Ana Range Camp, and the Orogrande Range Camp facilities.

### **3.3.2.2 Solid Waste Disposal**

According to the 2010 EIS, domestic solid waste generated at Fort Bliss is collected and disposed of by a private contractor at a government-owned landfill. This landfill accepts Type I

waste (refuse) and Type IV waste (construction and demolition waste). The Type IV cell currently accepts approximately 44 tons of waste per day and can accept waste for approximately ten more years. The landfill is governed under TCEQ and EPA rules and regulations.

#### **3.3.2.3 Water Supply**

Potable water is provided to Fort Bliss from on-post wells and interconnections with El Paso Water Utilities (EPWU). Water wells provide potable water for the Range and Cantonment Areas. Additional capacity can be provided to the Cantonment Area through the EPWU.

The Kay Bailey Hutchison desalination plant was built in 2007 as a joint effort between the EPWU and Fort Bliss to address water supply demand in the area. At full capacity, the plant is capable of withdrawing approximately 30.5 million gallons per day (mgd) of brackish water from the Hueco Bolson aquifer, and producing 27.5 mgd of potable water. Based on current demand, the plant produces on average 3.5 mgd (EPWU 2011).

Total available water supply available to Fort Bliss is 22.9 mgd (US Army 2007). Approximately 15.8 mgd is generated from on-post wells, with 4.24 mgd provided from EPWU. In addition, BAAF has two wells, each capable of providing 1.44 mgd to the airfield and Aero Vista Housing. If needed, additional potable water sources could be developed from resources within the installation.

#### **3.3.2.4 Ground Transportation**

Several highways in the region provide access to Fort Bliss and El Paso. The major east-west access is provided by Interstate 10, which connects the area to western and central Texas to the east, and southern New Mexico and Arizona to the west. Loop 375 crosses the installation and connects with Interstate 10. The proposed IBCT Area Facility location is immediately adjacent to Loop 375 near Spur 601, another key regional roadway. US Highway 54 provides major thoroughfare access to the existing Cantonment Area. Highway 54 is also the nearest major roadway to the proposed Orogrande Facility. The proposed Doña Ana Facility is serviced by War Highway.

#### **3.3.2.5 Storm Water**

In the Main Cantonment area, most storm water runoff is drained through channels and lift stations to the Fort Bliss Sump. From this outlet, storm water drains to a series of basins and connects to the Rio Grande through the City of El Paso's municipal separate storm sewer system (MS4) (US Army 2010). There are other small connections with the MS4 at the post boundary, including curb and gutter flows from access roads to the post. Industrial discharges are currently covered by the TCEQ Multi-Sector General Storm Water Permit (TXR050000) and urban discharges are covered under a Phase II Small General Permit (TXR040000) (US Army 2010). Storm water in the Main Cantonment and Biggs Airfield is managed through drainage into the post sewer system or retention ponds. The other less developed areas in the proposed action have no storm water infrastructure in place. The soil types and nearly level topography at each of the sites promotes infiltration of rainfall, except for heavier rains which sometimes result in surface flow and temporary ponding.

### 3.3.3 Earth Resources

Fort Bliss lies within the Basin and Range physiographic province, a region covering much of the western U.S. consisting of prominent north-south-trending mountain ranges separated by expansive, sediment-filled basins. A large portion of Fort Bliss lies within the Tularosa Basin comprised of basin-fill gravels, sands, and finer sediments; relatively coarse alluvial fan deposits along the basin margins; and silty lacustrine deposits in playa lakes.

The proposed IBCT Facility Area (approximate elevation 3,980 feet); Cantonment Area Facility (approximately 3,880 feet); and Orogrande Area Facility (elevation approximately 4,220 feet), lie atop a thick sequence of basin-fill gravels, sands, silts, and clays, and intermittent fluvial deposits. The proposed Doña Ana project area (approximate elevation of 4,080 feet) is situated on the western edge of the Tularosa Basin on a gently-sloping alluvial fan south of the Organ Mountains (USGS 1997; 2011).

Soils at the IBCT Area are mapped in the the Elizario-Copia complex, two to five percent (95 percent of project area), and the McNew-Copia-Foxtrot complex, one to five percent slopes (five percent of area) (NRCS 2010). These soils are forming in eolian (wind-deposited) sand dunes which typically overlie older Holocene alluvial deposits. The Cantonment and Biggs area soils are mapped as Cavalry loamy fine sand, 1 to 3% slopes, comprised of moderately deep, well drained, alluvium and/or eolian sands (NRCS 2010).

The Orogrande Area consists of Pendero fine sand, with 2 to 5% slopes, made up of moderately deep, excessively drained, fine eolian sand, mainly as sand sheets. Soils at the Doña Ana Area consist of Reyab silt loam (1 to 3% slopes), which are comprised of moderately deep, well drained, silty loam associated with alluvium derived from limestone. Soils in all four areas are prone to wind erosion (soils blowing hazard) (NRCS 2010).

### 3.3.4 Air Quality

The USEPA has established primary and secondary National Ambient Air Quality Standards (NAAQS) under the Clean Air Act Amendments of 1990 (CAAA). The CAAA also set emission limits for certain air pollutants from specific sources, set new source performance standards based on best demonstrated technologies, and established national emission standards for hazardous air pollutants. The 2007 EIS provides additional details on Federal and local air quality regulations.

The USEPA classifies the air quality within an Air Quality Control Region (AQCR) according to whether the region meets federal primary and secondary air quality standards. An AQCR or portion of an AQCR may be classified as attainment, non-attainment, or unclassified with regard to the air quality standards for each of the criteria pollutants. "Attainment" describes a condition in which standards for one or more of the six criteria pollutants are being met in an area. The 2007 EIS defines criteria pollutants and their corresponding NAAQS. An area is considered an attainment area for only those criteria pollutants for which the NAAQS are being met. "Nonattainment" describes a condition in which standards for one or more of the six pollutants are not being met in an area. "Unclassified" indicates that air quality in the area cannot be classified and the area is treated as attainment. An area may have all three classifications for different criteria pollutants. The proposed fueling facilities are all located in attainment areas for

all criteria pollutants; therefore, General Conformity does not apply to this project. The 2007 EIS details the requirements of General Conformity and its applicability.

### 3.3.5 Water Resources

Main Cantonment Area freshwater is supplied mainly from wells in the Hueco Bolson aquifer and a smaller portion from the Rio Grande through El Paso Water Utilities.. Aquifers primarily on the flanks of the Organ Mountains supply water for the Doña Ana and Orogrande range camps.

Precipitation is historically low throughout the region, with the average annual range being 8 to 13 inches. A portion of this precipitation in the Main Cantonment, IBCT, and BAAF areas becomes runoff to the Rio Grande. Doña Ana and Orogrande areas are located in a closed basin that has no external drainage. No floodplains or wetlands are present (US Army 2011b).

The Kay Bailey Hutchison desalination plant protects fresh groundwater resources from brackish water intrusion. Existing water supplies are now augmented by the plant, ensuring that sufficient water is available for growth and development in the region for 50 years (EPWU 2011).

### 3.3.6 Biological Resources

The fuel facilities are located within the Basin Aeolian (Cantonment, IBCT and Orogrande) and Basin Alluvial (Doña Ana) Ecological Management Units (EMU) (US Army 2010). Plants common throughout these areas include honey mesquite (*Prosopis glandulosa*), broom snakeweed (*Gutierrezia saotthrae*), creosote bush (*Larrea tridentata*), sandsage (*Artemisia filifolia*), fourwing saltbush (*Atriplex canescens*), and mesa dropseed (*Sporobolus flexuosous*) (US Army 2010). Surveys to detect and control exotic and noxious weed species such as African rue (*Peganum harmala*) are ongoing at selected localities (US Army 2001). No wetlands or arroyo-riparian drainages were identified by the US Fish and Wildlife Service (USFWS), National Wetlands Inventory (NWI) at the proposed fuel facilities (USFWS 2011). A complete list of the plants making up the vegetative categories found on Fort Bliss can be found in the Fort Bliss Integrated Natural Resources Management Plan (INRMP) (US Army 2001).

Various invertebrates, reptiles, birds, and mammals occur on Fort Bliss (US Army 2010). Detailed lists of these species are available in previous Fort Bliss environmental documentation (US Army 2000; US Army 2005; US Army 2001) and in a Resource Management Plan Amendment prepared by the Bureau of Land Management (BLM) (BLM 2005). Fort Bliss also supports hunting of both large and small game species on the Doña Ana Range-North Training Areas and on the McGregor Range following New Mexico and Texas laws and regulations.

Federal and state-protected plant and animal species are known to occur or could potentially occur on Fort Bliss (US Army 2010). A total of approximately 57 species are currently protected under the Endangered Species Act (ESA) (16 USC 1531 et seq.). Protected species are highly unlikely to be found within the project areas except for the Texas horned lizard (*Phrynosoma hernandezii*), a Texas state threatened species which is relatively common in the Fort Bliss region. Potential migratory birds on Fort Bliss protected by the Migratory Bird Treaty Act of 1918 (16 USC 703-712) are detailed in the 2010 EIS (US Army 2010).



### 3.3.7 Cultural Resources

Cultural resources at Fort Bliss include prehistoric and historic archaeological sites, traditional cultural properties, sacred sites, buildings, structures, artifacts, cultural landscapes, and historic districts. Specific definitions of these resources and a detailed prehistoric and historic background of Fort Bliss are provided in the 2010 EIS (US Army 2010). Currently, Fort Bliss manages this cultural resources under the *Fort Bliss Integrated Cultural Resources Management Plan 2008-2012* (ICRMP) released in April of 2008 (US Army, 2008) and plans and legal historic preservation requirements including the Archeological Resources Protection Act (ARPA) of 1979, National Historic Preservation Act (NHPA) of 1966 (*16 USC 470 et seq.*), and the Native American Graves Protection and Repatriation Act (NABPRA) of 1990. Pursuant to Army Regulation AR 200-1, the GC at Fort Bliss is responsible for managing the cultural resources on the installation in compliance with all Federal laws, regulations, and standards

This project has been evaluated for impacts to historic and archeological properties. It complies with both the NHPA and the Programmatic Agreement (PA) entered into by Fort Bliss Garrison Command, the Texas State Historic Preservation Officer, the New Mexico State Historic Preservation Officer, and the Advisory Council on Historic Preservation for the Management of Historic Properties on Fort Bliss.

### 3.3.8 Noise

Noise is defined as a sound that can induce hearing loss or interfere with ordinary daily activities. Sound is a series of vibrations (energy) transmitted through a medium that are perceived by a receiver. Sound varies in intensity and frequency. Sound pressure level (SPL), described in decibels (dB) is used to quantify sound intensity. The SPL represented by a given decibel value is usually adjusted to make it more relevant to sound that the human ear hears especially well; for example, an “A-weighted” decibel (dBA) is derived from emphasizing mid-range frequencies to which the human ear responds especially well and de-emphasizing the lower and higher range frequencies.

The military noise environment generally consists of three types of noise: transportation noise from aircraft and vehicles, noise from firing at small-arms ranges, and impulsive noise from large-caliber weapons firing and demolition operations (US Army 2007). Current conditions for the proposed sites are described below and additional information on these sites can be found in the 2007 EIS.

#### Cantonment Area

In the Cantonment Area, fixed-wing aircraft from BAAF and El Paso International Airport along with the rotary-wing aircraft stationed at Biggs dominate the noise setting. Road, railroad, and construction noise are also present. Noise levels generated from vehicular traffic are more noticeable at the perimeter of the Cantonment Area. The noise level within the Cantonment Area site is between 65 dB DNL and 75 dB DNL (US Army 2007). Noise at the proposed IBCT Area site is less than 65 dB DNL and is composed primarily of traffic noise (US Army 2007). There are no noise-sensitive receptors near the proposed IBCT Area.

#### Range Areas

In the training areas which include Doña Ana and Orogrande range camps, existing sources of noise typically include military aviation activities, small-arms ranges, use of artillery, large-



caliber weapons training, combat demolition activities, and vehicular traffic. There are no noise-sensitive receptors in the Range Areas. Noise levels at the proposed Doña Ana fueling facility site currently approach 70 dB DNL due in part to nearby weapon firing. The proposed Orogrande fueling facility site is located just within the 57 dB DNL noise contour (US Army 2007).

### **3.3.9 Safety**

#### **3.3.9.1 Ground Safety**

All day-to-day operations and maintenance activities on Fort Bliss are performed by trained, qualified personnel in accordance with approved occupational safety and health standards. The handling, processing, storage, and disposal of hazardous by-products resulting from demolition, renovation, construction, operations, or maintenance are accomplished in accordance with all federal and state requirements.

The Fort Bliss Fire Department is responsible for fire suppression activities on Fort Bliss. The City of El Paso has a Mutual Support Agreement (MSA) with Fort Bliss to provide fire suppression support if needed. The Fort Bliss Fire Department also has a Mutual Aid Agreement with the BLM for responding to fires on both withdrawn land and Army fee-owned land in the Fort Bliss Training Complex (FBTC) (US Army 2007).

In addition, detailed safety procedures have been established for day-to-day operations and maintenance activities performed at Fort Bliss.

#### **3.3.9.2 Fuel Safety Hazards**

The UFC system provides planning, design, construction, sustainment, restoration, and modernization criteria for all DoD projects. UFC 3-460-01, *Petroleum Fuel Facilities*, revised in 2010, incorporates changes to the design requirements for fueling facilities and provides basic guidance for use in designing liquid fueling and dispensing facilities, liquefied petroleum gas facilities, and compressed natural gas facilities. The fuel storage, handling, transportation, and distribution facilities are required to be designed with full consideration of the hazardous nature of the fuels to be handled and their vapors (DoD 2010).

There are currently no fueling facilities at the IBCT Area and Orogrande proposed locations; therefore, there is no risk of explosion or fire hazards associated with fuel at the proposed sites. The Cantonment Area's current fueling facilities poses a risk of fuel related fires and explosions; however, to date no explosions or fires related to fuel have occurred at the Cantonment site.

The potential does exist for safety incidents related to explosions or fires due to the transport of fuel and on-site fueling operations currently in practice in the training areas. Hazards related to on-site fueling operations and transporting fuel to training areas includes spillage; leaks; splashing; potential ignition hazards such as emissions from electromagnetic devices and the introduction of air into a fuel receiving system; static build-up; excessive pressure; contamination of fuel by dirt, water, and other fuels.

There have been a few large spills associated with fueling over recent years. In 2006 there was a spill at BAAF of over 1,000 gallons due to operator inattention and inadequate secondary

1 containment systems. Additionally, there were large spills that occurred during tanker refueling  
2 at BAAF in 2004 and 2006. There have also been spills in the Range areas associated with the  
3 transportation of fuel to training areas. Meyer Range suffered a spill due to a fuel pod rupturing,  
4 and fuel was spilled at the Doña Ana Range Camp during the refueling of a generator (Kipp  
5 2011).

### 6 **3.3.10 Hazardous Materials and Items of Special Concern**

7 Fort Bliss is categorized as a Large Quantity Generator of hazardous waste as defined by 44  
8 CFR, Parts 262 and 264. The installation is permitted to operate as a Hazardous Waste Storage  
9 Facility (HWSF) by the TCEQ. An Installation Hazardous Waste Management Plan provides  
10 detailed information on training, roles and responsibilities, identification, storage, transportation  
11 and spill control.

12 A number of programs are in place to manage hazardous waste and materials at Fort Bliss,  
13 including the Installation Restoration Program (IRP), Military Munitions Response Program  
14 (MMRP), Compliance-Related Cleanup (CC) and Pollution Prevention (P2).

## 15 **3.4 VECS ELIMINATED FROM DETAILED ANALYSIS**

16 The following VECs were eliminated from further evaluation for this analysis:

- 17 • **Airspace Use and Management** – The Proposed Action and No-action Alternative do  
18 not pertain to aircraft or airspace.  
19
- 20 • **Wastewater Treatment, Natural Gas, and Communications (Utilities)** –There would  
21 be no wastewater generated as a result of construction or renovation of the fueling  
22 facilities. *De minimis* quantities of municipal wastewater would be generated from  
23 restrooms at the facilities; however, only two to three facility attendants and sporadically  
24 fuel transport drivers would be utilizing the restrooms. Natural Gas would not be utilized  
25 during construction, renovation, or operation of the fueling facilities. Finally, there  
26 would be no change in the communication systems at Fort Bliss as a result of  
27 construction, renovation, or operation of the fueling facilities.  
28
- 29 • **Flight Safety (Safety)** –The Proposed Action and No-action Alternatives do not involve  
30 aircraft.  
31
- 32 • **Socioeconomic Resources** –There would be no population change associated with the  
33 Proposed Action or No-action Alternative, and therefore, no change to housing, public  
34 schools, law enforcement requirements, government structure, and medical services. No  
35 public funding would be used to fund the Proposed Action.  
36
- 37 • **Environmental Justice** – There are no environmental justice populations located within  
38 or adjacent to the proposed fueling facilities locations.

## CHAPTER 4 ENVIRONMENTAL CONSEQUENCES

### 4.1 INTRODUCTION

The activities associated with the Proposed Action Alternative would increase the effectiveness of the current mission of Fort Bliss. Table 4-1 summarizes the environmental consequences of the VEC analysis.

**Table 4-1 Summary of Environmental Consequences**

Resource	Proposed Action Construction, Renovation, and Operation of Fueling Facilities	No-action Alternative
Land Use	<ul style="list-style-type: none"> <li>No change to land use at Cantonment Area, Doña Ana, and IBCT facilities.</li> <li>Change in land use at Orogrande site from training to mission-support facility designation.</li> </ul>	<ul style="list-style-type: none"> <li>No change from existing status.</li> </ul>
Infrastructure	<ul style="list-style-type: none"> <li>Short- and long-term minor increases in electricity demand for the installation.</li> <li>New utility infrastructure would be required at IBCT, Doña Ana, and Orogrande sites.</li> <li>Short term, minor increases in solid waste generation.</li> <li>Short term increase in vehicular traffic and potential congestion on roadways, as well as roadway degradation and maintenance expenses.</li> <li>Increase in impervious surface and changes to current drainage and runoff characteristics at the proposed locations.</li> </ul>	<ul style="list-style-type: none"> <li>No change from existing conditions</li> </ul>
Earth Resources	<ul style="list-style-type: none"> <li>Permanent loss of vegetation beneath paving and minor erosion of loose fine-grained soil materials.</li> <li>No change to geology, seismicity, or physiography.</li> <li>No impact to soils as a result of vehicular traffic.</li> <li>Minimal soil disturbance at the perimeter of the paved surfaces due to foot traffic.</li> </ul>	<ul style="list-style-type: none"> <li>No change from existing conditions</li> </ul>
Air Quality	<ul style="list-style-type: none"> <li>Short-term air emissions during construction and installation. Use of BMPs will minimize fugitive dust during constructions.</li> <li>Negligible increase in air emissions from additional fuel capacity. Emission control technologies would be utilized to minimize fuel evaporation by capturing and recirculation of volatile compounds.</li> <li>No significant contribution to greenhouse gases (GHGs) as GHGs from combustion of fuel itself, not evaporation.</li> </ul>	<ul style="list-style-type: none"> <li>No change from existing conditions</li> </ul>
Water Resources	<ul style="list-style-type: none"> <li>Minor, long-term decrease in aquifer recharge due to the addition of impervious surfaces.</li> <li>No impacts to surface waters.</li> </ul>	<ul style="list-style-type: none"> <li>No change from existing conditions</li> </ul>

Resource	Proposed Action Construction, Renovation, and Operation of Fueling Facilities	No-action Alternative
Biological Resources	<ul style="list-style-type: none"> <li>No direct impacts to biological resources at the Cantonment Area facility.</li> <li>Permanent loss of eight acres of Basin Desert Shrubland (Coppice Dunes); however, this loss is minor because this is the most dominant vegetation type on post.</li> <li>Possible mortality to burrowing species at Orogrande and IBCT facilities.</li> <li>Short-term impacts to wildlife populations due to construction and operation noise.</li> <li>Possible increased mortality to Texas horned lizards due to construction and operational traffic; however, the species would not be appreciably impacted.</li> <li>No impact on migratory birds.</li> <li>No impacts to wetlands or arroyo-riparian drainages.</li> </ul>	<ul style="list-style-type: none"> <li>No change from existing conditions</li> </ul>
Cultural Resources	<ul style="list-style-type: none"> <li>Existing surveys indicate that no surface cultural resources exist at the proposed locations for the Doña Ana, Orogrande and IBCT facilities.</li> <li>The Proposed Action is not within the viewshed of a historic district.</li> </ul>	<ul style="list-style-type: none"> <li>No change from existing conditions</li> </ul>
Noise	<ul style="list-style-type: none"> <li>Short-term increase in noise levels from construction activities.</li> <li>No impacts to noise-sensitive receptors.</li> <li>No long-term increase in noise levels.</li> </ul>	<ul style="list-style-type: none"> <li>No change from existing conditions</li> </ul>
Safety	<ul style="list-style-type: none"> <li>Increased fuel risk hazard at the IBCT, Orogrande, and Doña Ana sites.</li> <li>No change to ground safety hazards.</li> </ul>	<ul style="list-style-type: none"> <li>No change from existing conditions</li> </ul>
Hazardous Materials and Items of Special Concern	<ul style="list-style-type: none"> <li>No appreciable change in types or quantities of hazardous materials on the installation.</li> </ul>	<ul style="list-style-type: none"> <li>No change from existing conditions</li> </ul>

1

## 2 4.2 PROPOSED ACTION

### 3 4.2.1 Land Use

4 Under the Proposed Action the Cantonment Area including the proposed Cantonment Area and  
5 IBCT sites would remain single mixed-use designation. Therefore, there would be no impacts to  
6 land use in the Cantonment Area.

7 The Doña Ana area is currently designated as mission support facility and would not change land  
8 use designations. The Orogrande site is located in a Range Area used primarily for training for  
9 on- and off- road vehicle maneuvering, aerial drop zones, and artillery firing areas. The  
10 Orogrande fueling facility site would change to mission support facility designation. Land use  
11 changes at the Orogrande site would be long-term; however, it would be compatible with  
12 surrounding land use designations.

## **4.2.2 Infrastructure**

### **4.2.2.1 Electricity**

Certain modifications may be required to meet current UFC and National Fire Protection Association (NFPA) requirements at the proposed Cantonment and Biggs fueling sites. Electrical tie-in would be required for the IBCT, Doña Ana and Orogrande facilities from nearby distribution lines. This would potentially involve ground disturbance and potential downtime to existing distribution systems to install electrical lines and connect to the power grid, respectively. In order to minimize potential issues associated with the installation of additional electrical infrastructure to support the fueling facilities, the Lessee/Contractor's ongoing coordination and communication with base and governmental authorities having jurisdiction would be vital. This would include proper coordination of all dig permits and engagement with local affected facility support personnel. Under the Proposed Action, the construction and operation of three new fueling facilities and renovation of one existing facility would result in both short- and long-term minor increases in electricity demand for the installation; however, sufficient electrical capacity exists to support this increase.

### **4.2.2.2 Solid Waste Disposal**

The Proposed Action would be expected to generate primarily minor increases in solid waste generation. It is anticipated that the majority of solid waste would be generated during construction of the facilities and demolition of the existing Doña Ana and BAAF fueling facility. It would be necessary to ensure that construction activities occurring in Texas are properly coordinated with the Fort Bliss TCEQ Construction General Permit. In New Mexico, construction activities would be coordinated under the EPA Region VI Construction General permit held by the installation. Long-term, *de minimis* quantities of municipal solid waste would be generated by the personnel operating the facilities.

All solid waste generated from the construction, operation, and demolition activities of the Proposed Action would be separated into recyclable and non-recyclable and disposed of at an approved disposal facility for that type of waste.

### **4.2.2.3 Water Supply**

Limited water supply infrastructure is currently in place at the proposed locations of the Doña Ana and the Orogrande fueling facilities (US Army 2010). Water connections are available for the Main Cantonment, IBCT, and BAAF facilities.

The UFC requires that fire protection components be installed for above ground fuel storage facilities in order to permit control of brush and grass fires, and to provide for cooling of storage tanks in the event of fire. Additional water supply infrastructure would be required at the proposed facilities at the Doña Ana Range Camp, the IBCT and the Orogrande location to comply with UFC standards. The day-to-day operation of the fueling facilities would not be expected to result in a change in water demand.

### **4.2.2.4 Ground Transportation**

The proposed locations for the new fuel facilities at the IBCT Area, the Doña Ana Range Camp and Orogrande Range Camp are near existing paved roadways. In addition, the existing

Cantonment Area facility is similarly accessible. It is anticipated that construction and renovation activities for the proposed facilities would have a short term impact in terms of vehicular traffic and potential congestion on these roadways, as well as roadway degradation and maintenance expenses. Additionally, there would be a minor, long-term increase in traffic in the areas of the fueling facilities, due to refueling activities. The 2034 TransBorder Metropolitan Transportation Plan, as referenced in the 2010 EIS, takes into consideration the planned growth of Fort Bliss. This vision seeks to address long term traffic needs and to provide the way forward to ensure that acceptable levels of service exist.

#### **4.2.2.5 Storm Water**

The construction of new fuel facilities at the IBCT area, Orogrande Range Camp, and the Doña Ana Range Camp would create additional impervious surface and alter current drainage and runoff characteristics. This would be managed with design of new storm drainage systems at those sites, which would comply with Section 438 of the Energy Independence and Security Act (EISA) of 2007.

Additionally, areas currently stabilized with vegetation may be disturbed due to construction activities. As such a SWPPP following Fort Bliss Construction SWPPP guidance would be developed outlining the Best Management Practices (BMPs) to be undertaken to prevent stormwater runoff during and following construction (US Army 2011). Such BMPs could include application of water sprays to keep soil from becoming airborne, the use of silt fences, covering of soil stockpiles, use of soil sealants, establishment of buffer areas near arroyos, and re-vegetation of disturbed areas in a timely manner.

Remote spill containment systems would also be included in the design for the facilities in order to prevent the potential migration/contamination of fuel into the storm runoff system.

#### **4.2.3 Earth Resources**

Geological resources would not be affected and no bedrock outcrops are found in any of the proposed areas. Soils have been previously disturbed from mechanical grading in Doña Ana Range Camp; intermittent off-road vehicle traverses at the IBCT and Orogrande sites; and surfacing and paving at the Main Cantonment and Biggs Airfield locations..

Under the Proposed Action, construction vehicle traffic is expected to be limited to existing paved or gravel roads, and no new roads are planned for construction. Surface paving for entrance driveways, fueling areas, and parking may be required. Construction activity would potentially result in limited soil erosion if wind generates airborne dust at the three new facility worksites. However, this effect would be transitory, occurring during the construction phase. BMPs to prevent soil loss may include erosion control measures such as application of chemical dust suppressants.. Following construction activities, soils would be little affected from foot or vehicular traffic associated with the operation of the fueling facilities apart from minor amounts of soil compaction in unpaved areas.

#### **4.2.4 Air Quality**

The construction of the fueling facilities would result in short-term elevated emissions during



construction and installation of associated infrastructure, principally from site clearing/preparation activities and the use of construction equipment and related vehicles. However, the effects from construction activities would last only as long as the duration of construction activity, fall off rapidly with distance from the construction site, and would not result in long-term impacts. BMPs to reduce fugitive dust during construction would include watering the disturbed area of the construction, covering dirt and aggregate trucks and/or piles, prevention of dirt carryover to paved roads, and the use of erosion barriers and wind breaks.

There would be a negligible increase in the Installation's air emission profile from the additional fuel storage capacity. Emission control technology however would be utilized to minimize air emission release through the capture and re-circulation of volatile compounds.

The amount of greenhouse gas (GHG) released under the Proposed Action would be negligible. Any GHG release would result from the delivery fuel trucks and vehicles utilizing the facilities, as GHG emissions are the result of combustion of fuels, not the fuel itself.

#### **4.2.5 Water Resources**

The Proposed Action could cause a minor decrease in aquifer recharge due to the addition of impervious surfaces; however, new storm water drainage infrastructure would help to direct runoff to detention ponds or storm drains. The Proposed Action would have no effect on surface water.

#### **4.2.6 Biological Resources**

No direct impacts are anticipated to biological resources at the Cantonment Area facility that have not previously been analyzed in the 2007 EIS and 2010 EIS (US Army 2007 and US Army 2010), as it is located in a developed area of the post and no ground disturbing activities are anticipated during construction.

Approximately eight acres of Basin Desert Shrubland (Coppice Dunes) would be permanently lost due to the Proposed Action. This permanent loss of Basin Desert Shrubland (Coppice Dunes) would be minor because this is the most dominant vegetation type on the post. Construction traffic and increased operational traffic to the fuel facilities may increase the introduction and spread of invasive or non-native plant species on the Post; though this is considered a minor potential impact as surveys to detect and control exotic and noxious weed species on Fort Bliss are ongoing and will continue (US Army 2001).

As discussed in the 2007 EIS and 2010 EIS, direct wildlife mortality from the Proposed Action would be expected to be negligible because wildlife populations, including game species, have been exposed to military training activities for decades, and population levels likely reflect a level of habituation to those activities. Construction of the IBCT area and Orogrande Range Camp fueling facilities could result in localized displacement of wildlife. Impacts to burrowing, species and migratory birds would be minimized by the implementation of pre-construction surveys to identify and avoid any potential nests prior to ground disturbing activities or clearing activities would be carried out during the non-nesting season. The impacts to wildlife populations due to construction and operation noise are anticipated to be short-term (US Army 2007 and US Army 2010).

The Proposed Action would have no effect on listed species, as documented in the 2010 EIS. Construction and operational traffic could result in increased mortality to Texas horned lizards; however, this species is widespread and relatively abundant in the region and should not be appreciably impacted. The Proposed Action would have no impact on migratory birds beyond those analyzed in the 2007 EIS and 2010 EIS (US Army 2007 and US Army 2010).

#### **4.2.7 Cultural Resources**

Surveys for cultural resources at the sites for the IBCT area, Doña Ana Range Camp, and the Orogrande Range Camp fueling facilities discovered no archeological sites eligible for inclusion in the National Register of Historic Properties. Additionally only renovations are posed for the existing Cantonment Area facility and no ground disturbance is proposed. None of the proposed fueling facilities are located within the viewshed of a historic district; therefore it is unlikely that cultural resources would be adversely affected.

If any sub-surface cultural resources are encountered during the construction of the fueling facilities or supporting infrastructure however, they would be properly mitigated per the PA. Any discovery of possible human remains would be treated in accordance with NAGPRA and the Standard Operating Procedures (SOPs) set out in the ICRMP.

#### **4.2.8 Noise**

The analysis of noise impacts is based primarily on the potential for human annoyance and on land use compatibility. It is anticipated that typical construction vehicles and equipment would include a backhoe, front-end loader, compactor and grader to be used during site preparation, construction, and finishing work.

The noise associated with the Proposed Action would come from the construction and renovation of the proposed fueling facilities rather than the operation of the facilities. The noise associated with the operation of machinery on construction sites is typically short-term, intermittent, and highly localized. Additional information on noise effects at Fort Bliss can be found in the 2007 EIS.

The only proposed fueling facility that has nearby noise-sensitive receptors is the Cantonment Area. The closest noise-sensitive receptor this facility is the Fort Bliss National Cemetery, located 0.5 miles from the proposed site. Construction noise would be expected to dissipate before it reaches the cemetery. The Child Development Center and Athletic Field are both greater than 0.5 miles from the proposed site; therefore, the noise from the construction would not cause an impact. Consequently, there would be no noise impacts to noise-sensitive receptors as a result of the Proposed Action.

#### **4.2.9 Safety**

Federal, civil, and military laws and regulations govern operations on Fort Bliss by prescribing measures, processes, and procedures required to ensure safe operations and to protect the public, military, and property. Under the Proposed Action, operations at the fueling facilities would be conducted in accordance with applicable laws and regulations.

#### **Ground Safety**



The Proposed Action would not affect the number of military personnel assigned to Fort Bliss and would not result in an increase in the amount of training; therefore, the ground safety risks would remain the same. Current fire suppression capabilities at Fort Bliss would be adequate to respond to fires caused by construction and operation of the proposed fueling facilities.

All proposed new construction facility locations would be surveyed for UXO prior to construction. Any detected UXO will be either be destroyed in place or removed for demolition on an explosive ordnance disposal range by EOD personnel, as per approved procedures for Fort Bliss.

#### Fuel Safety Hazards

The proposed fueling facilities would be constructed and operated under UFC 3-460-01 regulations, which meets all applicable federal, state, and local regulations concerning the environmental, health, safety, and fire protection issues.

The Cantonment Area's existing fueling facility would be renovated to current standards. Since there is already a fueling facility in the Doña Ana Range Camp, the fuel safety hazards would remain the same. However, since there are no existing facilities in the IBCT Area, Doña Ana Range Camp, or the Orogrande Range Camp, there would be an increased fuel risk hazard at these proposed locations.

#### **4.2.10 Hazardous Materials and Items of Special Concern**

It is not anticipated that the proposed construction of new fueling facilities would result in additional hazardous materials consideration other than what is currently managed and permitted by the installation. The construction of permanent fueling facilities, as opposed to current fuel delivery in fuel trucks to respective training areas, would be expected to reduce potential environmental impacts by lessening the chance of spills. Additionally, operation of these facilities would not be expected to create unmanageable quantities of hazardous waste. Any petroleum, oil, and lubricant waste generated by the operation of the facilities would be managed under the Installation Hazardous Material Waste Management Program.

Decommissioning and demolition of any fuel site would undergo a thorough review for the presence of asbestos and lead-based paint on the structural surfaces, and fuel leaks or spills that may have affected the soil surface. These, if found, would be reported to the state regulatory agencies and remediated per regulatory and Fort Bliss requirements.

#### **4.3 NO-ACTION ALTERNATIVE**

Under the No-action Alternative, fueling facilities would not be constructed or renovated at Fort Bliss. Soldiers would continue the practice of hauling fuel via tanker trucks and buffalo trailers to training sites, detracting from the training mission. Fueling operations would continue to be inefficient and costly. Under the No-action Alternative, there would be no change to existing conditions for VECs listed in Table 4-1.

**4.4 CUMULATIVE IMPACTS**

Cumulative Impacts are defined as the impacts on the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. Although the Proposed Action is not specifically addressed in the 2007 EIS and the 2010 EIS, the cumulative impact on the natural and human environment from construction of support facilities and infrastructure on Fort Bliss is covered in these documents. The Proposed Action would not significantly change those analyses.

There would be a negligible increase in electrical consumption from the construction and operation of the fueling facilities on the Installation.

## CHAPTER 5 MITIGATION MEASURES

In Table 5-1 is presented measures to minimize or reduce impacts and BMPs anticipated for impacts under the Proposed Action Alternative.

Table 5-1 Summary of Measures to Minimize Impacts

Resource	Measures to Minimize or Reduce Impacts and BMPs
Land Use	No mitigation measures or BMPs are necessary.
Infrastructure	Energy saving features in electrical systems design for the facilities would assist in reducing the electrical footprint. Impacts to drainage would be minimized through the use of BMPs such as application of water sprays to keep soil from becoming airborne, the use of silt fences, covering of soil stockpiles, use of soil sealants, the establishment of buffer areas near arroyos, and re-vegetation of disturbed areas in a timely manner.
Earth Resources	No mitigation measures are necessary. BMPs to prevent soil loss and minimize the exposure of surface soils during construction could include implementation of temporary erosion control plans, thereby reducing the total amount of soil lost to construction vehicle traffic.
Air Quality	No mitigation measures are necessary. BMPs include watering the disturbed area of construction, covering dirt and aggregate trucks and/or piles, prevention of dirt carryover to paved roads, and the use of erosion barriers and wind breaks.
Water Resources	No mitigation measures are necessary. BMPs include creation of new storm water drainage infrastructure to route storm water to detention ponds or storm drains.
Biological Resources	Ground clearing activities must occur during the non-nesting season unless a pre-construction survey is undertaken to identify and avoid any nests. Surveys to detect and control exotic and noxious weed species on Fort Bliss would continue.
Cultural Resources	Fort Bliss would conduct section 106 coordination with the SHPOs of both Texas and New Mexico. Fort Bliss would consult with the tribes regarding the Proposed Action.
Noise	No mitigation measures or BMPs are necessary.
Safety	No mitigation measures or BMPs are necessary.
Hazardous Materials and Items of Special Concern	Decommissioning and demolition of fuel sites would undergo a thorough review for the presence of asbestos and lead-based paint on the structural surfaces, and fuel leaks or spills that may have affected the soil surface. These, if found, would be reported to the state regulatory agencies and remediated per regulatory and Fort Bliss requirements.

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**CHAPTER 6**  
**LIST OF PREPARERS**

<b>Name/Organization</b>	<b>Degree</b>	<b>Resource Area</b>	<b>Years of Experience</b>
Ashley Naber/WESTON	BAIS, International Business; MAG, Resource and Environmental Studies	Resource Specialist, Land Use, Noise, Safety, Socioeconomics, Environmental Justice	1
Barry Peterson/WESTON	BS, Meteorology; MS, Atmospheric Sciences	Resource Lead, Air Quality	11
Erin Johnson/WESTON	BS, Microbiology; MS, Oceanography	Resource Lead, Biological Resources, Cultural Resources	5
J. Frank Burgess, REM, REPA/WESTON	BS, Business Administration	Technical Review	30
John F. Barrera/Fort Bliss DPW-E	BA, Biology	NEPA Program Manager	30
John Kipp/Fort Bliss DPW-E	Ph.D, Soil Science	NEPA Planner	25
Karen Martin/WESTON	B.B.A. Business; A.A.S. Radiology	QA/QC review	7
Kevin Wooster/WESTON	BS, Geology; MS, Hydrogeology	Resource Lead, Earth Resources	24
Mark Walker/GSRC- Fort Bliss	BS, Forest Management	NEPA, Energy NEPA	30
Owena Yang-Totorica/WESTON	B.A. International Studies	Project Manager	18
Sheila McInnis/WESTON	--	Resource Specialist, Infrastructure, Water Resources, Hazardous Materials	19
Tamara Carroll/WESTON	BS, Bioenvironmental Science	Project Task Lead; Resource Lead, Infrastructure, Water Resources, Hazardous Materials and Items of Special Concern, Land Use, Noise, Safety, Socioeconomics, Environmental Justice	9

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## CHAPTER 7 REFERENCES

- BLM. 2005. Bureau of Land Management. RMP: Resource Management Plan and Environmental Impact Statement. Las Cruces Field Office. Las Cruces, New Mexico. January.
- EPWU. 2011. El Paso Water Utilities. Desalination Plan Information. Available at: [http://www.epwu.org/water/desal\\_info.html](http://www.epwu.org/water/desal_info.html). Accessed 16 November.
- DoD. 1994. Department of Defense. DOD Manual 4140.25-M, "DoD Management of Bulk Petroleum Products, Natural Gas, and Coal" June 1994
- DoD. 2004. Department of Defense. Directive 4140.25, "DoD Management Policy For Energy Commodities and Related Services" April 12, 2004
- DoD. 2004. Department of Defense. DoD Directive 5101.8, "DoD Executive Agent for Bulk Petroleum," August 11, 2004
- DoD. 2010. Department of Defense. Unified Facilities Criteria (UFC): Design: Petroleum Fuel Facilities. [http://www.wbdg.org/ccb/DOD/UFC/ufc\\_3\\_460\\_01.pdf](http://www.wbdg.org/ccb/DOD/UFC/ufc_3_460_01.pdf). Accessed 26 October 2011.
- Kipp. 2011. Email correspondence between John Kipp, Fort Bliss NEPA Planner, and Tamara Carroll, Weston Solutions. 7 November.
- NRCS. 2010. Natural Resource Conservation Service. Online Soil Survey of Fort Bliss Military Reservation, New Mexico and Texas. <http://soils.usda.gov/survey>
- US Army. 2011. Fort Bliss Directorate of Public Works, Environmental Division – Guidance for Construction Storm Water Pollution Prevention (SPW3's) & Permits, Revised 31 Mar 11.
- US Army. 2011a. US Department of the Army. Fort Bliss, TX – Fact Sheet. 8 August.
- US Army 2011b. Record of Environmental Consideration for Property Lease for Contractor Owned and Contractor Operated Fueling and Storage Facilities. May.
- US Army. 2010. US Department of the Army. Fort Bliss Army Growth and Force Structure Realignment Final EIS. March.
- US Army. 2008. US Department of the Army. ICRMP: Fort Bliss Integrated Cultural Resources Management Plan 2008-2012. US Army Combined Arms Support Battalion and Fort Bliss. Fort Bliss, Texas and New Mexico. April.
- US Army. 2007. US Department of the Army. Fort Bliss Texas and New Mexico Mission and Master Plan Final Supplemental Programmatic EIS. March.
- US Army. 2005. US Department of the Army. SOP: Standard Operating Procedures for Weapons Firing and Training Area Use at Fort Bliss Training Complex. US Army Combined Arms Support Battalion and Fort Bliss. Fort Bliss, Texas and New Mexico.



- 1 US Army. 2001. US Department of the Army. INRMP: Fort Bliss Integrated Natural Resource  
2 Management Plan. US Army Air Defense Artillery Center and Fort Bliss. Fort Bliss,  
3 Texas. November.
- 4 US Army. 2000. US Department of the Army. MMP PEIS: Fort Bliss, Texas and New Mexico  
5 Mission and Master Plan Programmatic Environmental Impact Statement. US Army Air  
6 Defense Artillery Center and Fort Bliss. Fort Bliss, Texas.
- 7 USDOT. 2006. US Department of Transportation *Transit Noise and Vibration Impact*  
8 *Assessment*. Prepared by the Federal Transit Administration, Office of Planning and  
9 Environment. May.
- 10 USFWS. 2011. US Fish and Wildlife Service. National Wetlands Inventory Mapper;  
11 Classification of Wetlands and Deepwater Habitats of the United States. USFWS,  
12 Washington, DC. FWS/OBS-79/31., Washington, D.C., USFWS, Division of Habitat  
13 and Resource Conservation. <http://www.fws.gov/wetlands/>. Published 26 October 2011.
- 14 USGS. 2011. US Geologic Survey. The National Map Viewer.  
15 <http://viewer.nationalmap.gov/viewer/>. October.
- 16 USGS. 1997. Compiled by Anderson, O.J., Jones, G.E., and Green, G.N. *Geologic map of New*  
17 *Mexico: US Geological Survey Open-File Report 97-52*.  
18 <http://tin.er.usgs.gov/geology/state/sgmc-unit.php?unit=NMQTSf%3B0>.

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**APPENDIX A**

**SUMMARY OF FORT BLISS FUELING PLAN**

## Current Fuel Capacity

<b>Biggs AAF</b>	JP8	2 ea 25,000 Gal AST
	JP8	1 ea 250,000 Gal AST
	GUR	1 ea 25,000 Gal AST
<b>Biggs AAF</b>	JP8	Aviation fuel is a COCO with 10 ea 25K
	Below ground tanks located in the civilian aircraft part of BAAF.	
<b>Dona Ana Range</b>	GUR	2000 Gal AST
	JP8	5000 Gal AST
<b>McGregor Range</b>	GUR	20,000 Gal. UST
	JP8	15,000 Gal. UST
<b>TMP</b> (Cassidy Rd)	JP8	1 ea 10,000 Gal UST
	GUR	2 ea 10,000 Gal UST
	E85	1 ea 10,000 Gal UST

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## Bliss Fuel Plan (End State 2012/13)

<b>Loop 375 BULK</b> (new facility)	JP8	2 ea 120,000 Gal AST (240K total)
	GUR	1 ea 20,000 Gal AST
		2 ea 5,000 Gal AST Waste Tanks
<b>Loop 375 Retail</b> (new facility)	JP8	2 ea 20,000 Gal AST
	GUR	1 ea 25,000 Gal AST
	E85	1 ea 12,000 Gal AST
	BIO	1 ea 12,000 Gal AST
<b>Biggs AAF (CAB)</b> (new facility)	JP8	2 ea 180,000 Gal AST (aviation 360K total)
<b>Biggs Hot Fuel</b> (new facility)	JP8	2 ea 30,000 Gal AST
		1 ea 500 Gal AST Waste Tank
<b>Dona Ana Range</b> (new facility)	GUR	12,000 Gal (retail)
	JP8	12,000 Gal (retail)
<b>McGregor Range</b> (no change)	GUR	20,000 Gal AST (retail – current location)
	JP8	15,000 Gal AST (retail – current location)
<b>Oro Grande</b> (new facility)	JP8	200,000 Gal AST (bulk)
	JP8	20,000 Gal AST (retail)
	GUR	12,000 Gal AST (retail)
<b>Bldg 2642</b> (renovated)	GUR	20,000 Gal AST (retail)
	DS2	10,000 Gal AST (retail)

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## Annual Fuel Consumption

(data includes TMP, Dona Ana, McGregor Range, & Bulk Farm sales in gallons)

<u>Year:</u>	<u>GUR</u>	<u>E85</u>	<u>JP8</u>
2004	594,120	0	2,619,731
2005	644,104	0	2,605,990
2006	759,253	16,431	2,034,443
2007	786,866	22,172	1,822,426
2008	886,836	23,891	2,017,151
2009	848,737	22,858	1,978,579
Jan-Jun 2010	455,027	25,602	974,778

GUR and E85 are primarily for GSA vehicle support. Some units such as the Canadian Army use GUR for some of their vehicles and equipment when they come here for annual training.

DS2 (Ultra Low Sulfur Diesel) started to be used in 2010 by the locomotives and fire department. This will be used more in the coming years as GSA trucks/buses will be using DS2 in much greater numbers.

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## FBTX Requirements

### Main Garrison Bliss Requirements

- Bulk Petroleum Storage Facilities (East Bliss-BCTs) **COCO**
- Tactical/Non-tactical Retail (East Bliss-BCTs) **COCO**
- Non-tactical Retail (Main Bliss) **GOCO**
- Aviation Storage Facilities (Biggs AAF) **GOCO**
- Hot Refueling (Biggs AAF) **GOCO**

### McGregor Requirements

- Tactical/Non-tactical Retail **GOCO**

### Dona Ana Requirements

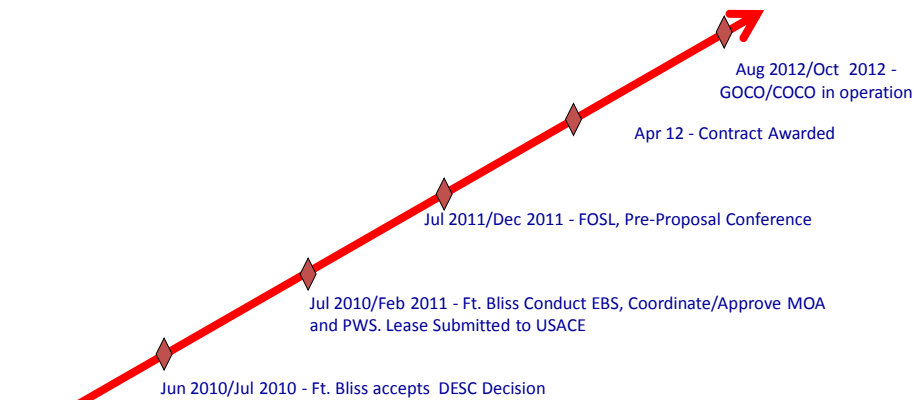
- Tactical/Non-tactical Retail **GOCO**

### Orogrande Requirements

- Tactical/Non-tactical Retail **COCO**
- Bulk Storage **GOCO**

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## Estimated Timeline for Implementation



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**APPENDIX B**  
**INTERAGENCY AND PUBLIC COORDINATION**

**DISTRIBUTION LIST:**

**Libraries**

El Paso Main Library  
501 N. Oregon St.  
El Paso, TX 79901

Alamogordo Public Library  
920 Oregon Ave.  
Alamogordo, NM 88310

**Federal Agencies**

Jennifer Montoya, NEPA Coordinator  
Bureau of Land Management  
Las Cruces District Office  
1800 Marques Street  
Las Cruces, NM 88005

James Christensen, McGregor Range  
Bureau of Land Management  
Las Cruces District Office  
1800 Marques Street  
Las Cruces, NM 88005

Dr. Benjamin Tuggle, Regional Director  
US Fish and Wildlife Service  
500 Gold SW, Room 6034  
Albuquerque, NM 87102

Adam Zerrenner, Field Supervisor  
U.S. Fish and Wildlife Service  
Austin Ecological Services  
10711 Burnet Road, Suite 200  
Austin, TX 78758

Wally Murphy, Field Supervisor  
NM Ecological Services Field Office  
US Fish and Wildlife Service  
2105 Osuna NE  
Albuquerque, NM 87113



Deborah Hartell  
DPW-E-C  
Environmental Division, Bldg. 163  
White Sands Missile Range, NM 88002

**New Mexico State Agencies**

Mrs. Georgia Cleverly  
Border and Environmental Reviews  
New Mexico Environmental Department  
1190 St. Francis Road  
Santa Fe, NM 87502

Michael Kesler, Acting District Manager  
New Mexico Environment Department  
Las Cruces District Office  
1170 North Solano Drive, Suite M  
Las Cruces, NM 88001

Ray Aaltonen, Chief  
New Mexico Game and Fish, SW Area  
2715 Northrise Drive  
Las Cruces, NM 88011

Mark L. Watson  
Conservation Services Division  
New Mexico Department of Game and Fish  
P.O. Box 25112  
Santa Fe, NM 87504

Leon Redman  
Division Chief - SE Area  
New Mexico Department of Game and Fish,  
1912 West 2nd Street  
Roswell, NM 88201

Todd Stevenson, Director  
New Mexico Department of Game and Fish  
P.O. Box 25112  
Santa Fe, NM 87504

1 Ms. Jan V. Biella, RPA, Interim State Historic Preservation Officer  
2 State of New Mexico Office of Cultural Affairs  
3 Historic Preservation Division  
4 Bataan Memorial Building  
5 407 Galisteo Street, Suite 236  
6 Santa Fe, NM 87501  
7

8 **Texas State Agencies**  
9

10 Mark Wolfe, Executive Director  
11 Texas Historical Commission  
12 P.O. Box 12276  
13 Austin, TX 78711-2276  
14

15 Dr. James Bruseth, Director  
16 Department of Antiquities Protection  
17 Texas Historical Commission  
18 P.O. Box 12276  
19 Austin, TX 78711-2276  
20

21 Stan Graves, Architect  
22 Texas Historical Commission  
23 P.O. Box 12276  
24 Austin, TX 78711-2276  
25

26 Lorinda Gardner, Regional Director  
27 Texas Commission on Environmental Quality  
28 401 E. Franklin Ave Ste 560  
29 El Paso, TX 79901-1206  
30

31 Carter Smith, Executive Director  
32 Texas Parks and Wildlife Department  
33 4200 Smith School Road  
34 Austin, TX 78744  
35  
36